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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,514	07/28/2003	Masuhiko Natsuhara	39.020-AG	1513

29453 7590 06/29/2005

JUDGE PATENT FIRM  
RIVIERE SHUKUGAWA 3RD FL.  
3-1 WAKAMATSU-CHO  
NISHINOMIYA-SHI, HYOGO, 662-0035  
JAPAN

EXAMINER

KACKAR, RAM N

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/604,514

Applicant(s)

NATSUHARA ET AL.

Examiner

Ram N. Kackar

Art Unit

1763

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/12/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

**Shamouilian et al (US 6494958) in view of Heimann et al (US 6620707).**

Shamouilian et al disclose a wafer holder for a semiconductor manufacturing equipment (Fig 1-210) having a surface for carrying wafers and an electrical circuitry (electrode) formed inside (Fig 1-220 or 230), the electrical circuitry having porosity (mesh size - Col 9 lines 42-46) and comprising silver, molybdenum, tantalum, tungsten or platinum (Col 9 lines 33-38). The electrode could be an RF electrode (Col 5 lines 48-50) or an electrostatic chuck (Col 4 lines 35-37). The wafer holder including the electrode could be made by sintering (Col 7 lines 9-14).

Regarding the porosity the mesh size could control the porosity to a required degree.

The recitation of the electrode being a sinter laminae is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

However sintered electrode of platinum for heating is disclosed by Heimann et al (Col 1 lines 48-57).

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Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to make the electrode as sintered as an alternative and art recognized equivalent to porous mesh.

**3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shamouilian et al (US 6494958) in view of Munshi et al (US 5654030).**

Shamouilian et al disclose a wafer holder for a semiconductor manufacturing equipment (Fig 1-210) having a surface for carrying wafers and an electrical circuitry (electrode) formed inside (Fig 1-220 or 230), the electrical circuitry having porosity (mesh size - Col 9 lines 42-46) and comprising silver, molybdenum, tantalum, tungsten or platinum (Col 9 lines 33-38). The electrode could be an RF electrode (Col 5 lines 48-50) or an electrostatic chuck (Col 4 lines 35-37). The wafer holder including the electrode could be made by sintering (Col 7 lines 9-14).

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However sintered porous electrode of platinum is disclosed by Munshi et al (Col 6 16-36).

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Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to make the electrode as sintered as an alternative and art recognized equivalent to porous mesh.

**4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niori et al (US 6197246) in view of Heimann et al (US 6620707).**

Niori et al disclose a wafer holder for a semiconductor manufacturing equipment (Fig 7-41) having a surface for carrying wafers and an electrical circuitry (electrode) formed inside (30), the electrical circuitry having porosity (mesh size) and comprising molybdenum, tantalum, tungsten or platinum (Col 10 lines 57 to Col 11-line8). The electrode could be an RF electrode (Fig 7).

Regarding the porosity the mesh size could control the porosity to a required degree.

The recitation of the electrode being a sinter laminae is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

However sintered electrode of platinum for heating is disclosed by Heimann et al (Col 1 lines 48-57).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to make the electrode as sintered as an alternative and art recognized equivalent to porous mesh.

**5. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niori et al (US 6197246) in view of Munshi et al (US 5654030).**

Niori et al disclose a wafer holder for a semiconductor manufacturing equipment (Fig 7-41) having a surface for carrying wafers and an electrical circuitry (electrode) formed inside (30), the electrical circuitry having porosity (mesh size) and comprising molybdenum, tantalum, tungsten or platinum (Col 10 lines 57 to Col 11-line8). The electrode could be an RF electrode (Fig 7).

Regarding the porosity the mesh size could control the porosity to a required degree.

The recitation of the electrode being a sinter laminae is a product by process limitation. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

However sintered porous electrode of platinum is disclosed by Munshi et al (Col 6 16-36).

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Ram Kackar

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